

Notice of Allowability

Application No.

10/668,293

Examiner

Thomas H. Parsons

Applicant(s)

SAWACHI, YOUICHI

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 24 September 2003.
2. ☒ The allowed claim(s) is/are 1-3.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/~~Comment~~
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Daryl Mexic on 28 November 2005.

The application has been amended as follows:

Page 14, the last sentence has been deleted.

2. The following is an examiner's statement of reasons for allowance:

The claimed invention is directed towards a battery housing comprising a fulcrum which is arranged on an inner surface of a battery cartridge and configured to come into contact with a periphery of the battery; and an elastic body which is arranged on an inner surface of a battery cartridge housing, wherein when the battery cartridge is inserted into and extracted from the battery cartridge housing, the elastic body presses the periphery of the battery continuously from an area distant from the fulcrum to another area distant from the fulcrum across an area near the fulcrum to make the first battery wobble about the fulcrum, thereby making the terminal of the first battery rub against the terminal of the second battery.

DE2020235 discloses a housing which houses two batteries that engage contacts at each end. Built into the top is a finger-operated plunger and on the underside is a spring. By pressing the plunger, the battery contacts are rubbed against fixed contacts to remove any oxidation.

JP2003-178733 discloses a battery housing into which batteries are inserted. The batteries and the connection terminals at both sides of the battery are scrubbed against each other by making a holding member formed on the inside of the battery lid move laterally thereby causing the batteries to rotate. In another embodiment, the terminal for cell connection is formed in a terminal base arranged at the edge of a battery compartment, the terminal base is connected with the cell lid by a link mechanism, and is freely moveable upwardly with the link mechanism. Upon actuation, as the lid is moved upward, the terminal base is caused to move in an opposite direction (downward). In this way, when the lid and the terminal base move, the electrodes at both ends of the cell rub against the terminals, thereby effecting a self-cleaning of the contacts to thereby lowering contact resistance.

Neither of these prior art references, teach or suggest a battery housing comprising a fulcrum which is arranged on an inner surface of a battery cartridge and configured to come into contact with a periphery of the battery; and an elastic body which is arranged on an inner surface of a battery cartridge housing, wherein when the battery cartridge is inserted into and extracted from the battery cartridge housing, the elastic body presses the periphery of the battery continuously from an area distant from the fulcrum to another area distant from the fulcrum across an area near the fulcrum to make the first battery wobble about the fulcrum, thereby making the terminal of the first battery rub against the terminal of the second battery.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas H. Parsons whose telephone number is (571) 272-1290. The examiner can normally be reached on M-F (7:00-4:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas H Parsons
Examiner
Art Unit 1745



PATRICK JOSEPH RYAN
SUPERVISORY PATENT EXAMINER